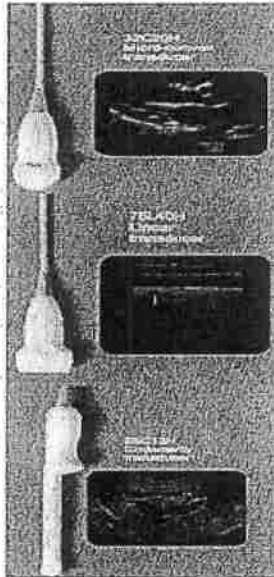
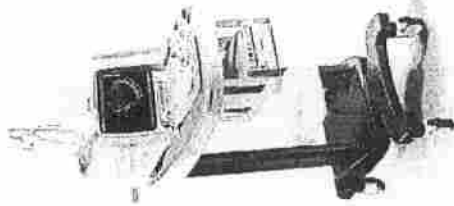


## C 40

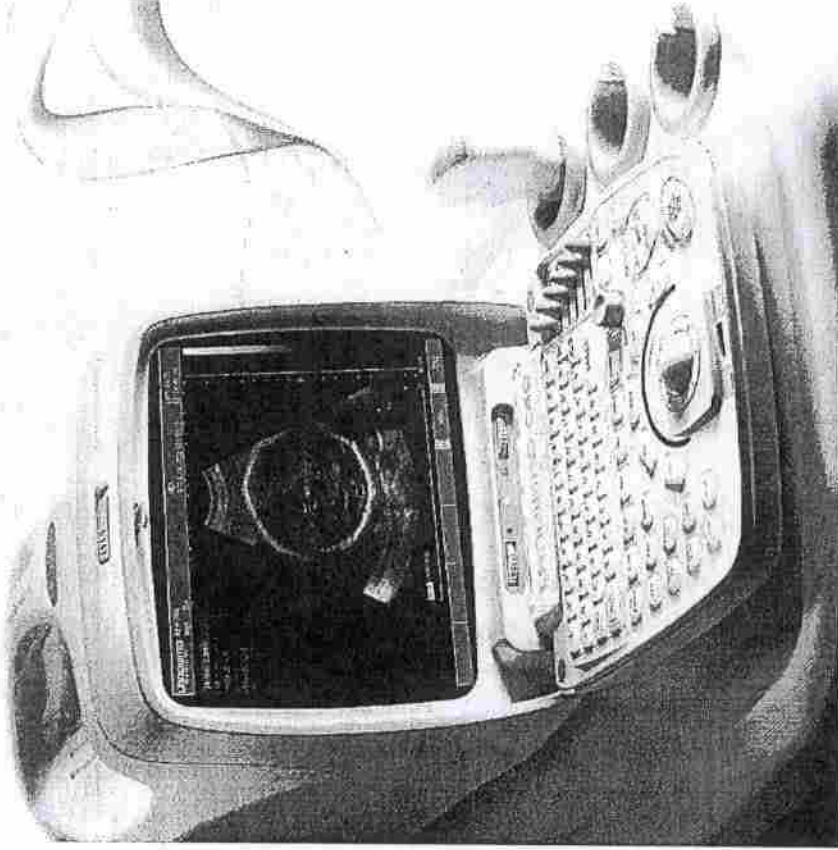


DESCRIPTION	3 years Warranty Price + GST
<b>Standard Configuration, including:</b>	\$ 8,250.00
<b>C40 MAIN UNIT</b>	
10" non-interlaced monitor	
Two transducer connectors	
Two USB ports	
6-segment TGC	
512-frame cine loop	
Measurement & calculation software packages	
1 unit of 35C60HC electronic convex probe ( 2.0/3.5/4.5/5.5MHz )	
<b>Probes</b>	12 month Warranty Price + GST
32C20HB Electronic micro-convex probe ( 2.0/3.5/4.5/5.5MHz )	\$ 3,760.00
75L40HE Electronic linear probe ( 6.0/7.5/8.5/10MHz )	\$ 3,245.00
65C13HC Electronic endocavity probe ( 5.0/6.5/8.0/9.0MHz )	\$ 3,760.00
<b>Options</b>	
Mobile trolley	\$ 1,140.00
B&W Thermal printer	\$ 2,100.00

10.4.3



## NeuCrystal™ C40



## NeuCrystal™ C40

Full Digital, Portable, Ultrasound Diagnostic Scanner

Landwind International Medical Science Pte Ltd  
Landwind Science & Technology Park, Tangjiao Avenue,  
Shiyuan Town, Bao'an District, Shenzhen China 518108  
Tel: +86-755-83033788 Fax: +86-755-27353240  
Email: Sales@landwindmedical.com  
Web: www.landwindmedical.com

0407210119 10

LANDWIND  
MEDICAL

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# **BUILDING INSPECTION REPORT**

**Ravensthorpe Kindergarten**

**Reserve No: 29730**

**Lots 564/565**

**No 14 & 16**

**Daw St Ravensthorpe WA 6346.**



**Bill Auburn.**

**Builders Rego No 8812.**

**Mobile 0429383120.**

**Home 08 98383120.**

**Fax 08 98383200.**

Ravensthorpe Shire

Building Maintenance Officer

Health & Building

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[bmo@ravensthorpe.wa.gov.au](mailto:bmo@ravensthorpe.wa.gov.au)

Site visit for Inspection carried out on 20-05-2010.

10.4.4

As a fully qualified Registered Builder and the Shire's Building Maintenance Officer, I am supplying the following report, as requested by the CEO of the Shire of Ravensthorpe, in relation to the structural & physical integrity of the Ravensthorpe Kindergarten Building located in Daw Street.

The attached excel spreadsheets go into detail in regard to my report. Photographs accompany this report for your perusal.

Research of the Council's archives has found some information and plans in regard to this facility. The original part of the building was built approximately in 1969, at least 40 years ago.

Since that time a variety of improvements, additions, renovations and serious structural & rectification repairs to the building have taken place.

Council has on file some of the Original reports from the PWD in regard to structural failures of the building. There is also information on the structural matters & renovation works dated in 1978 and in the mid 1980's.

The building is built over two lots. Its original structure was a double brick building with a steel portal support frame with timber purlin beams for the roof.

The roof cladding is "Cliplock" a well used product of the day as it had concealed fixings & was available in long lengths.

The windows are aluminium framed with Clear glass.

The original ceiling was a suspended "T-bar" grid system using flat asbestos painted ceiling panels.

The building consisted of a toilet facility, store rooms, a large play area containing a small kitchen sink and a front entrance verandah.

In or around 1985 an extended play area, an office and a waiting area were added to the east side along with a new verandah.

It is apparent that the building was having serious structural problems due to the reactive nature of the site and insufficient ground works. Other works were commissioned to try to rectify any further damage. The new additions in 1985-85 were of timber frame construction with gyprock lining internally & Hardi-Plank lining externally. Some brickwork was demolished and replaced with new timber framed walls & Hardi-Plank lined walls.

Specialized drainage systems were proposed to alleviate the ongoing sub soil water issue. A stormwater diversionary concept was developed and works undertaken by a local contractor in 1985 to install concrete perimeter drainage to a sump. This sump contains an electric submersible pump with a float switch that pumps excess storm water supposedly to the front street of the reserve.

It is still in the original location today. I am led to believe though, that for quite some time it has not been operating properly as the sump was full of Kikuyu grass on the day of my inspection. I removed the grass & roots that were stopping the pump from operating as it should be. The pump then began to draw water from the sump and pump it out to?? Its connection method. to the external power point. is highly illegal.

I would sincerely advise, should Council wish to retain the building and attempt to rectify and/or renovate the premises, that the following be considered in addition to my recommendation;

A professional assessment be undertaken of the building by the following trades

Building Health Surveyor (BCA & Australian Standards))

Structural Soil Engineer

Structural Building Engineer

Architect or Drafts Person incorporating appropriate Planning Conditions

Electrician

Licensed Plumber

Licensed Painter

FESA

OSH (Asbestos removal)

And any other agency that may have standards to adhere to as to meet the BCA or any additional authority associated with the purpose/use of the building.

Based on the age and the current condition of the facility, it is my professional opinion that this building is a major liability to the Shire of Ravensthorpe in its current form.

The most practical solution & cost effective way to carry on the purpose of the reserve would be to demolish the building and re-build/ re-develop on one side of the lot.

Please note my assessment does not cover a termite inspection.

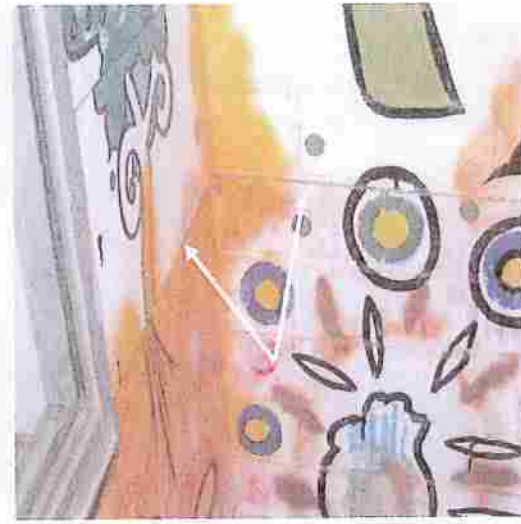
Yours sincerely,

Bill Auburn.

22-05-2010.

A handwritten signature in black ink that reads "Bill Auburn". The signature is written in a cursive style and is positioned below the typed name and date.

Visible cracks in Brickwork outside the building.



Cracks in External Hardi-Plank Wall Lining



Front Verandah Concrete Floor Cracks & Subsidence.



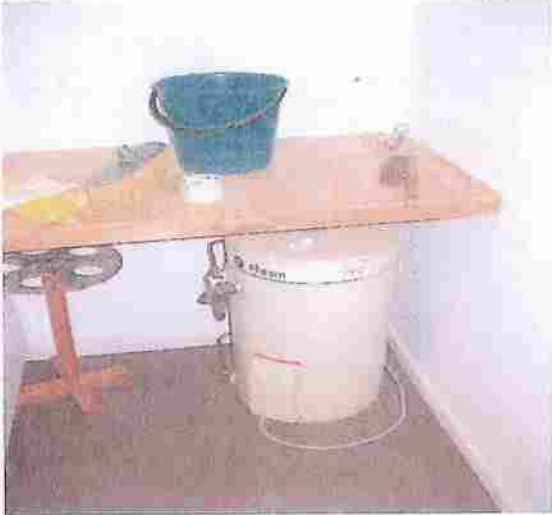
Bad Cracks in Brickwork Inside



Painting Area Sink Cupboard



HWS in Storeroom



Old Gas Room Heater



Ablution Sink/Trough



Disabled Toilet



Baby Change area in Ablutions





Old Kitchen Sink & Cupboard



Gas Stove



Main Doors are Unsuitable Sliders



East Exit Door



Children's Toilet Cubicles



Store Room Ceiling & Cupboard



Inside Views of Main Area



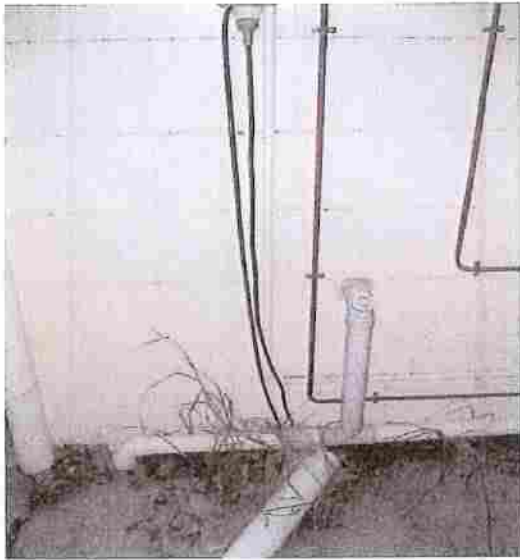
Ceiling Fan Controllers



Electrical Sub-Board Tagged Out



Cables to Pump outside.



Ceiling Fan. Painted Asbestos ceiling.



Stormwater "Pit" Cracked Concrete with Weed Infestation to Sump



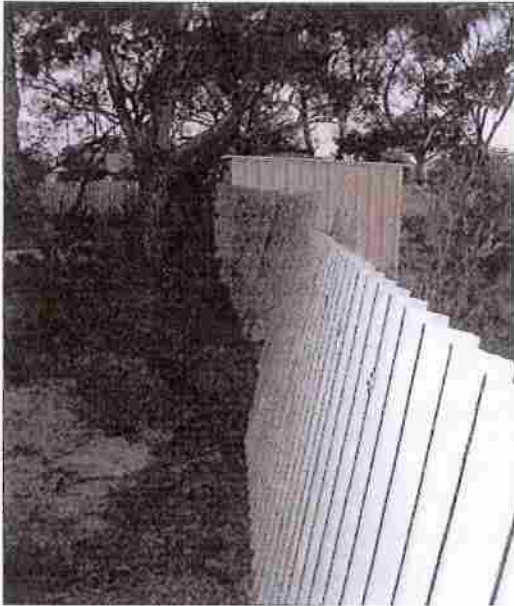
Stormwater Pipe Fitting Leaking



Sewer main Riser at Rear of Lot



Asbestos Division Fence



West Side Division Fence



Main Front Fence No Parking



Front Entrance Gate to Main Doors



Rear Fence Leaning Over



Front Portion of Eastern Fence



END.

<b>Building Name:</b>	Ravensthorpe Pre-School Centre Kindy.		
<b>Building Description:</b>	Brick-Fibro-Iron Site-built building with staged additions since early 1970.		
<b>Address:</b>	LOT 564 & 565 No 14 & 16 Daw Street Ravensthorpe.		
<b>Division Code:</b>	1086030	<b>Activity Code:</b>	Age Of Building: Over 40 years
<b>Date of Inspection:</b>	20-5-2010	<b>Officer Name:</b> Bill Auburn	<b>Officer Signature:</b> <i>Bill Auburn</i>
<b>Water Meter No:</b>	BK 0623539	<b>Electric Meter No:</b> 15M62102	<b>Phase:</b> Single
<b>Overhead Power:</b>	✓	<b>Underground Power:</b> N/A	
<b>Termite Certificate Date:</b> Nil		<b>Pest company:</b> Albany Pest & Weed	<b>Reserve No:</b> 29730
<b>Gas Fitter Certificate :</b> Nil			
<b>Energy Efficiency Cert:</b> Nil			
<b>Sewered:</b>			
	Sewer Riser is at the rear SW Boundary. No paper work to show sewer connection date to town system.		
	Research of Council Plans of the reserve shows original copy, septic tank application dated 25-11-1969.		
	The building is constructed across the boundary of Lot 564 & 565 Daw St Ravensthorpe. It is not clear if the lots are amalgamated. This would have to be checked with the Council's planning Department.		
	Footings etc are questionable and no evidence of a proper sandpad under the building. Major cracking to front verandah floor & walls is indicative that the base structure of this building is inadequate. Much work would have to be undertaken to try to rectify the defective footings.		

# INSIDE

## Entry/Foyer

### COMMENT

Front Door  
2 sliding timber 3/4 clear glazed doors

Crash Bars  
Nil

Drop Bolts  
2 of. One at the base of each door needs repair.

Door Frame  
Solid timber needs repaint and sealing. Neither of the doors are vermin proof. Large gaps etc.

Sliding Door Track  
Operational but very inefficient. Need to adjust doors on sliding overhead track to close properly

Storm seal  
Need repair

Hinges  
N/A

Entrance Set  
Lockwood Nightlatch operational with key.

Deadlock  
N/A

Security Screen  
2 Aluminium hinged semi security half panel/Mesh doors. No lock present but closers in fair condition

Floor Covering  
Vinyl in reasonable condition, clean with no visible tears.

Walls  
Painted standard brickwork. Shows signs of SERIOUS cracking adjacent to doorframe & front window

Ceiling  
Suspended painted asbestos flat sheet. Looks in ok condition. Should be professionally removed.

Architraves  
Solid timber needs repaint.

Skirting  
Common Black Vinyl in reasonable condition.

Lights  
This room has a common ceiling through the main entry/work/play & kitchen area all w/- fluoro lighting

Switches  
2 banks near entry inside. Old need replacing. Third bank is switched from eastern entry door/office

Power Points  
No power points in entry region.

Ceiling Fans  
Total of 5 throughout main ceiling. Controllers at Main entry doors inside. None were operational

and part of the speed controller knob was missing on one of the units. Fans appear to be in fair

condition & some of the ceiling shrouds need refitting properly.

	COMMENT
Main Hall	Carpet & Vinyl throughout. All in fair condition.
Floor Covering	Part painted standard B/work and new section is framed and gyprock clad with up caneite attached up to 2.0M high to provide pin up material for posters etc. Some bad cracking/movement throughout.
Walls	Suspended painted asbestos sheet in original section. Needs removing. Newer West & east section has what appears to be a suspended painted gyprock or similar 600 x 1200 grid panel using Rondo t-bar system.
Ceiling	The ceiling looks clean & tidy but shows some serious sagging above the entrance to the front office.
Skirting	Some timber in new east section. Vinyl in other areas. All in fair condition. Needs repaint/varnish.
Architraves	Some timber in new east section. All in fair condition. Needs repaint/varnish.
Lights	This room has a common ceiling through the main entry/work/play & kitchen area all w/- fluoro lighting
Power Points	A few doubles scattered throughout at various heights.
Door & Hinges	Eastern side entrance door is a timber half panel clear glass hinged door needs repaint
Door Handle	Lockwood lever lock type in fair condition. Key operation OK.
Door Jamb	Painted timber needs repaint/varnish. Door opens in. Query that both lots of entrance doors in a Public building should open out for OSH & FESA standards, BCA?
Crash Bars	Nil
Drop Bolts	N/A
Window Glass	All aluminium windows in the main hall section of the building have clear glass. All glass is in good order i.e. no cracked panels visible. Some of the rollers are stiff & all could do with tracks cleaned out
Window Locks	Most appear ok but all require some minor maintenance.
Flywire	Some flyscreens are non existent. Some need repair & flywire replaced where holes are prevalent.
Window Reveals	Some are plain painted brick, some are either painted or varnished timber, others flushed gyprock all require some painting or minor repair.
Window Sill	Painted timber needs repaint/varnish.
Heating	Adjacent to the kitchen on the back wall inside the main room is an old gas heater. This should be removed.
Air Conditioner	There is evidence of a once existing split system on the back wall. This has been removed and the circuit breaker in the internal electrical sub-board has been tagged out. I have instructed P Rothnie to disconnect the power to this circuit in the back of the sub-board.
Fire Extinguishers	
Location	One 9kg BCF adjacent to the dbl front entrance doors. One 2kg BCF & a fire blanket in the kitchen area
Date Due For Service	September 2010

Uni-WC Changer/room	COMMENT
Floor	Vinyl in fair condition
Wall Tiles	Black vinyl standard skirting to floor/wall junction in fair condition. Wall tiles above sinks are fair.
Grout	V
Floor Waste	V
Cisterns& Seats	2 of Duo Flush Caroma Concorde wall mounted white. Both in working order no leaks.
Pans & Adaptors	Wall exit, vitreous white ceramic all ok.
Flush Pipes	All ok no leaks
Mini-stops & Hoses	No Leaks
WC Roll Holders	All ok
Shower Base & Grate	N/A
Shower Head & Taps	N/A
Plumbing	There is <b>no hot water</b> to this area for the washing of hands etc.
Vanity Basin/s	This room does not have a purpose designated vanity basin. Under health regulations it should.
Vanity Plumbing	N/A as no vanity basin exists. There is however a stainless steel sink with a drainer that is in fair order
Vanity Taps	N/A as no vanity basin exists. There is however a stainless steel trough & cupboard that is in fair order
Walls	Cracks in wall lining in the cubicles & adjacent to the west facing windows & above the SS trough.
Ceiling	Suspended Rondo grid system throughout, with painted panels in reasonable condition.
Cubicle Partition Walls	Few small cracks to the wall lining junctions that need repair.
Cubicle Doors & Hinges	All ok but require a repaint.
Architraves	All ok but require a repaint.
Lights & Switches	3 small fluoro's operated by one switch located just outside the door to this room.
Power Points	Nil
Exhaust Fans	Nil
Door & Hinges	All ok needs repaint.
Door Handles Privacy	Nil
Door Jamb	Painted timber in reasonable condition. Could do with a repaint.
Window Glass	Obscure glass slider with PV to top of panel, the glass is sound.
Window Rollers	Fair, track need cleaning.
Window Locks	does not work needs repair/replacing.
Flywire	Needs replacing
Window Sill & Reveals	Gyrock reveals all around. Cracked needs repair & repaint.
Mirror & Paper Towel	No mirror exists but the Kimberley Clark paper towel dispenser is ok, located adjacent to small sink.







Dining/Meals Area	COMMENT
Floor Covering	Vinyl with a few marks & ripples
Walls	Fibro in need of a repaint
Ceiling	Common with main hall area suspended asbestos flat painted panels. Needs changing.
Skirting	Black standard vinyl in fair order.
Architraves	All ok but require a repaint.
Lights & Switches	This room has a common ceiling through the main entry/work/play & kitchen area all w/- fluoro lighting
Power Points	Nil
Smoke Alarm	Nil
<b>Store Room 1</b>	
Floor Covering	Old Carpet need replacing
Walls	Gyprock/fibro in need of repaint and replace cracked sheets on west walls near windows
Ceiling	Suspended Rondo with painted grid panels in good condition.
Skirting & Architraves	Painted timber in good condition needs repaint.
Lights & Switches	2 single bayonet fittings with bare globes. Switched from just outside door to this room.
Power Points	Only one visible adjacent to the HWS. This point is faulty & I have instructed the electrician to fix.
Door & Hinges	Fair condition but badly needs repainting.
Door Handle/Lock	Fair order old type though.
Door Jamb	Fair condition but badly needs repainting.
Shelving	Various types of fixed shelves throughout most will need to be replaced and made good & uniform.
Window Glass	All ok
Window Rollers	Need repairs
Window Locks	working but need maintenance.
Flywire	None to either window new screen & flywire required.
Window Sill & Reveals	Gyprock reveals all around. Cracked needs repair & repaint.
Trough	This room has a SS trough mounted on a metal frame with PVC drainage and a hand shower type tap all are ok with no leaks. This room houses the 50L Electric Rheem HWS, which is currently disconnected due to fault.
<b>Storage Cupboards</b>	Most need updating
Door & Hinges	
Door Handle/Lock	
Door Jamb	
Shelving	



Office	COMMENT
Floor Covering	Carpet in Fair condition.
Walls	Many cracks in the painted gyprock wall linings, especially around each of the windows. Major cracks in east wall.
Ceiling	Suspended Rondo grid with painted panels need a clean but generally in good condition.
Skirting	Solid varnished timber needs re coating
Architraves	Solid varnished timber needs re coating
Lights	1 diffuser twin fluro. Needs new cover.
Switches	Operational.
Power Points	the few in there appear to be ok. See comment re electrical.
Door & Hinges	Solid varnished timber 1/2 panel clear window light needs re coating. Glass is free of cracks. Not sure if safety glass
Door Handle	Passage lever set all working. Lock is a nightlatch type that functions ok.
Door Jamb	All sound
Window Glass	3 Outside facing & 1 Internal facing all in fair condition clear and free of cracks.
Window Rollers	Most seem fine but all could do with cleaning and some minor maintenance.
Window Locks	Very stiff to operate need adjustment.
Flywire	All need repairing
Window Reveals	Gyprock painted all need patching/re painting. Very bad cracks around windows need wall sheet replacing
Window Sill	Varnished Timber needs re doing.
Air-conditioning	
Split System Model	The unit that was fitted to the back wall near the kitchen area has been removed to the School.
Vermin Access	Therefore the building has <b>no</b> air-conditioning.
Efficiency	N/A
	N/A
Air-con motor	
Filters & Drain	
Ventilated Site	
Good Base For Unit?	
Heating	
LPG Bayonet Heater	N/A
Flue Inside	N/A

HWS	COMMENT
LPG Gas	N/A
Electric Storage	Rheem 50L looks to be in fair condition. As the power point is not working the HWS was unable to be tested.
Solar	N/A
Tempering Valves	Nil. There should be a tempering valve fitted to the HWS by law.
Hot+Cold Relief Valves	Hot working Cold needs servicing
<b>Insulation</b>	
Ceiling	No evidence of insulation.
Roof	Unable to determine
Walls	Unable to determine
<b>Work Area</b>	
Floor Covering	Vinyl clean & in fair condition
Walls	Painted brick on the main walls & small partition walls are gyprock/fibro clad topped with a varnished wooden top.
Ceiling	Common with main hall area suspended asbestos flat painted panels. Needs changing.
Skirting	Some black standard vinyl & some timber all in reasonable condition.
Architraves	Solid varnished timber needs re coating
Lights & Switches	This room has a common ceiling through the main entry/work/play & kitchen area all w/- fluoro lighting
Power Points	Nil
Door & Hinges	Nil
Door Handle	Nil
Door Jamb	Nil
Window Glass	Clear & free of cracks
Window Rollers	Need maintenance.
Window Locks	Need maintenance.
Flywire	Need to be changed
Window Reveals	Painted face brick. Evidence of walls cracking.
Window Sill	Painted timber
Sink & Cupboards	Low level cupboard topped with a small side drained stainless steel sink
Taps	One cold only wall mounted in working order.
Drainage Plumbing	PVC & adequate at the moment.



## OUTSIDE

Roof Covering Type & Condition	COMMENT
Fixings	<p>Very flat skillion roof using a Cliplock system. All appears to be in fair condition. Some rust is evident above the kitchen. Based on the age of the building it would seem evident that the roof &amp; flashings would need replacing within the next few years. Some of the roof sheets sag and create areas for water to sit. This is an inherent issue when used to support the internal suspended ceiling grid panel system.</p> <p>The Cliplock System uses a concealed clip to hold each roof sheet down, therefore no fixings penetrate the roofing iron. Some have rust in them.</p>
Roof Frame Type	<p>This consists of a basic steel portal structure with timber beams for purlins &amp; ceiling support.</p> <p>All in fair condition. The steel beams &amp; the steel verandah posts are all in need of a thorough sandblasting. Then a good prime &amp; paint. This also applies to the Façade sub-structure.</p>
Roof Plumbing	<p>No evidence of leaking internally.</p>
Gutter	<p>Sheerline box type Colorbond. In need a clean and has a few leaks at the joins. Due to be replaced.</p>
Fascia	<p>Trimdek facade mounted on timber &amp; steel sub-structure. This is very faded &amp; has an extremely out dated appearance</p>
Eaves Lining	<p>Nil</p>
Downpipes & Clips	<p>All of these need work as they are either non existent or broken/cracked and leak which enhances the current footings movement problems.</p>
Stormwater Disposal	<p>Extremely questionable. There has been in the past an attempt to divert water away from the building to offset the major problem of movement of the building &amp; footings. This is now totally dilapidated and unsafe methods are still in use to pump the diverted stormwater away from the building. <b>Illegal electrical work exists</b> to the submerged pump at the rear SW Cnr, servicing a below ground stormwater storage tank. The lids are not secured &amp; extremely unsafe.</p>
Wall Cladding	<p>Plain Hardi-Plank. All in a very poor condition. Many sheets are cracked &amp; need replacing.</p>
Type & Condition	<p>Cream</p>
Colour	<p>Paintwork is in a very poor state</p>
Painting	<p>Fair</p>
Fixings	<p>Generally all framed walls appear reasonably true &amp; plumb.</p>
Wall Frame	<p>Generally all framed walls appear reasonably true &amp; plumb.</p>



Main Concrete Floor	COMMENT
Floor Slab	Unable to completely view the floor as it is covered with Vinyl & Carpet. There is strong evidence throughout the building of severe cracking in wall sheeting and brickwork to indicate the floor would also have substantial flaws in it
Concrete Footings	Footings are deficient. Overtime there have been additions & rectification work to this building. It is extremely apparent that all the attempts have been unsuccessful at properly stabilizing the facility.
Brickwork	
Type	Standard face brick outside in original section of the building. All internal brickwork is painted.
Brickwork Condition	Poor and many severe cracks adjacent to windows and door openings.
Mortar Condition	fair
Weepholes	Nil
Vents	Nil
Dampcourse	No physical dampcourse is visible.
Front Verandah	
Floor type	Concrete. Major cracks & movement away from the building. Need to be removed & replaced.
Roof Frame	This consists of a basic steel portal structure with timber beams
Roof Cladding	Same as main roof as this is a common skillion.
Posts	The steel beams & the steel verandah posts are all in need of a thorough sandblasting and repaint.
Lights	Not working
Skylight Sheeting	N/A
Side Verandah	
Floor type	Concrete broom finish in fair condition. This slab is not part of the original building.
Roof Frame	This consists of a basic steel portal structure with timber beams as roof purlins.
Roof Cladding	Same as main roof as this is a common skillion.
Posts	The steel beams & the steel verandah posts are all in need of a thorough sandblasting and repaint.
Lights	Not working
Skylight Sheeting	N/A

Steps	COMMENT
Type	Concrete/Timber
Handrails	Nil
Balustrading	Nil
Location	Small steps to the east play area from the verandah.
<b>Teistra Connection</b>	
Pit Location	Just outside the NW front boundary close to where the overhead power supply comes into the lot.
Earthed	Unable to view
Entry Location	Unable to view
<b>Electrical Outside</b>	
Supply Post	Steel post to front of building in fair condition. This would have to go underground if works was done on the building
Spotlights	Nil
Wall Lights	Nil
Sensor	Nil
Waterproof Points	1 to rear to service submersible stormwater pump
Vandal Proof Lights	Nil
<b>Meter Box</b>	
Inspection Window	Yes
Termite Sticker	Unable to gain access to the meter box to view
RCD	Unable to gain access to the meter box to view
Circuit Breakers	Unable to gain access to the meter box to view
Old Fuse Type	Unable to gain access to the meter box to view

<b>Outside Plumbing</b>	<b>COMMENT</b> All would have to be properly checked by a licensed plumber to see if it meets the standards.
Gas Bottle & Security	One empty on site. Good secure housing/Shed with mesh gate but unlocked at present at rear of building.
Gas Regulator & Cover	Yes a twin manual change over type This would need pipe cleaned as one end has been left unsealed
Pressure Pump	N/A
Vent Pipes+Mossi Cowlis	All in need of painting. Clip need replacing
Drainpipes+Waste Flaps	Generally all are in fair condition
DT Mound & Grate	Yes . Appropriate PVC fittings & Inspection openings are visible & accessible.
Garden Taps	Two. Not leaking one to rear SE on back wall. One in front on NW Cnr
Copper pipe work	Fair
Water Meter	Front NE Cnr
Septic System	Research indicates septic tanks & leach drains were given approval in 1969. Time was not spent looking for this onsite.
	It seems clear that the lot/s are connected to the local sewer scheme, as a riser inspection pipe has been found at the
	SW rear Cnr of the block. It must be stated that there is <b>no history of this connection or application</b> in council's building records.
Diverter Valve	None visible
Reticulation	Evidence of a basic tap timed type used in the past. All in a state of disrepair.
<b>Shed 1</b>	<b>Small Garden type with a Skillion Roof at rear of the lot in very poor condition</b>
Size	3.0 M x 2.4M
Concrete Floor	Yes
Roof Cladding	Colorbond metal
Wall Cladding	Colorbond metal
Skylight Sheeting	Nil
Windows	Small fixed window in rear
Personnel Door	No longer fixed to shed
Roller Door	N/A
Sliding Door	N/A
Door Tracks	N/A
Lights	Nil
Switches	Nil
Power Points	Nil
Sub-board	Nil

<b>Shed 2</b>	<b>Small Garden type with a Gable Roof at rear of the lot in fair condition for it's age.</b>
Size	3.0M x 3.0M
Concrete Floor	Unable to confirm as no access to shed.
Roof Cladding	Galvanized metal
Wall Cladding	Galvanized metal
Skylight Sheeting	Nil
Windows	Nil
Personnel Door	Yes currently locked as this houses outside play equipment and toys. Not vermin proof.
Roller Door	N/A
Sliding Door	N/A
Door Tracks	N/A
Lights	Nil
Switches	Nil
Power Points	Nil
Sub-board	Nil
<b>Boundary Fencing</b>	
Location	<b>Front Fence.</b> Approx 900 mm high.
Type	Steel pipe post & rails with Cyclone diamond mesh.
Condition	Good
Gates & Latches	One personnel to main entrance. One combination small & large hinged gate to allow vehicle access & servicing.
<b>Boundary Fencing</b>	
Location	<b>West Side.</b> Approx 1.8 M high
Type	Colorbond Trimdek post & rail full length of this boundary.
Condition	Very Good
Gates & Latches	N/A
<b>Boundary Fencing</b>	
Location	<b>East Side.</b> 20 M Approx 900 mm high. The remaining towards the rear of the lot is @ 1.2 M high
Type	Front first @ 20M is Steel pipe post & rails with Cyclone diamond mesh. The remainder is post & rail Hardi Super Six
Condition	Steel fence good. Hardi fence poor.
Gates & Latches	N/A

Boundary Fencing		COMMENT
Location		Rear. The eastern most lot has a rear fence Approx 1.2 M high. The west lot has no rear fence to the lane
Type		Hardi-Fence Super Six profile could be asbestos.
Condition		Poor
Gates & Latches		One central, in fair condition, to allow for vehicle access.
<b>Internal Fencing</b>		
Location	Central Division Fence	Western Side Division Fence
Type	Approx 1.8 m high from back of building to rear lane. Super Six profile all <b>asbestos</b> on timber posts & rails.	Approx 1.0 M High from west side to boundary Steel pipe post & rails Cyclone diamond mesh.
Condition	Very Poor posts broken off and bad lean on sheets.	Poor pipe is rusty, gate hinges need adjustment Personnel gate to rear of this lot is ok.
Gates & Latches	N/A	
<b>Front Grounds</b>		
Lawn		Basic Kikuyu & clay sandy soil
Reticulation		Nil
Condition		Very Poor condition, basically non-existent very untidy and not maintained.
<b>Back Grounds</b>		
Lawn		Nil
Reticulation		Nil
Condition		Very Poor condition, basically non-existent very untidy and not maintained.
<b>Concrete Driveway</b>		
Type & Size		Nil
Weeding		N/A
Cracking		N/A
Trafficable		N/A
Undermining		N/A
Subsidence		N/A
<b>Crossover</b>		
Pavers		Nil
Concrete		Nil

Parking	COMMENT
Location	Currently the users of the facility have no onsite parking. Vehicles are parked on the verge adjacent to the council footpath. This is extremely dangerous considering the use of the building for children.
Paving	
Type & Size	600 mm x 600 mm concrete slab. Basic amount on the east side & from the front entrance gate to the front verandah.
Weeding	Required
Sinking	Pull up and relay
Missing	N/A
Border Cemented	N/A
Trafficable	Yes
Paths	Concrete paths to rear play area to access shed etc.
	Other concrete to the rear and west side of the building forming drainage for stormwater is in disrepair. Some is severely cracked and has allowed the ingress of Kikuyu grass into the effluent drainage piping causing a recent grey waste water blockage. I have asked the G Sutherland from our Town crew to spray the grass etc at this location.
Retaining Walls	
Type & Height	Concrete Approx 500 mm high.
Location	Rear on eastern rear of building adjacent to newer section of building.
Condition	Poor. These have sharp edges and unsuitable for the location. Crack in a few locations as well as leaning over.
Miscellaneous	
Evidence of Termites	Nil
Ants	Small black ants are again infesting the inside of the building. Purple meat ants have re-established at the front gate.
Rodent Vermin Etc	Council has kept up to date with vermin control using an Albany Pest Control Agency.
Window Awnings	Nil
TV Antenna	Nil
Washing Line	Nil
Play Equipment	Minor maintenance required. Need to check on suitability now new rulings apply to Playground equipment. None of the equipment has any soft fall adjacent to it therefore this would be deemed unsafe for child use
Sandbox & Shade	Needs repairs to both. Shade cloth is in a bad state and some battens have come away.



*Actions for Change*



Conference Home

C2C08 Darwin

Program (draft)

Accommodation  
Booking

Important Dates

Abstracts (Papers & Posters)

Keynote Speakers

Session Themes

Workshops

Registration & Info

Sponsorship

Exhibitions

Venue

Field Trips

Social Events

Organising  
Committee

Contact

Acknowledgements

About Coast to  
Coast

Administration

Login

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P:

Don't have a login?  
Forgot password?

# Coast to Coast 2010 Program

The below **draft** program will be updated with speakers and session titles. It is a 'Work in Progress' - building towards an exciting week of speakers, topics and networking. Make sure you check back!

WEEK AT A GLANCE - REFER TO DAILY TIMETABLES FOR DETAIL					
Monday 20 Sept	ROOM	Tuesday 21 Sept	Wednesday 22 Sept	Thursday 23 Sept	Friday 24 Sept
Registration	0800	Registration	Registration	Registration	Registration
Guided Meditation		Guided Meditation	Guided Meditation	Guided Meditation	Guided Meditation
<b>NRM Workshop</b>	<b>Theme</b>	<b>Planning for Change</b>	<b>Technical Workshops (am) &amp; Field Trips (pm)</b>	<b>Acting for Change</b>	<b>Implementing Change / Youth Day</b>
		Plenary session	Full day Field Trip: Coorong and Lower Lakes	Plenary session	Plenary session/Panel Discussion
09:00 Riverview Rooms	0900 Hall E	<b>International Perspectives</b> <u>Prof. Orrin Pilkey</u>	Workshop: Coastal Conservation	<u>Mr Karl Sullivan</u>	<b>Past</b> <u>Dr Richard Kenchington</u>
		<b>National Perspectives</b> <u>Prof. Bruce Thom</u>	Workshop: Coastal Climate Change Guidelines	<u>Prof. Anthony Cheshire</u>	<b>Present</b> <u>Dr Neil Lazarow</u>
		<b>Local Perspectives</b> <u>Ms Lorraine Rosenberg</u>	Workshop: Ecosystem Services	<u>Prof. Jan McDonald</u>	<b>Future</b> <u>Jason Tyndall</u> <u>Heide Alloway</u>
			Workshop: ACS: Planning for Coastal Management		
<b>Morning Tea</b>	<b>Morning Tea</b>	<b>Morning Tea</b>	<b>Morning Tea</b>	<b>Morning Tea</b>	<b>Morning Tea</b>
	Hall E	Panel discussion	Workshops	Q&A Session	Papers
	Mtg Rm 1	Papers	Workshops	Papers	Papers
	Mtg Rm 2	Papers	Workshops	Papers	Papers
	Mtg Rm 3	Papers	Workshops	Papers	Papers
	Mtg Rm 10	Papers	Workshops	Papers	Papers
<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b> People's Choice Poster - Authors to be by their Poster	<b>Lunch</b>	<b>Lunch</b> People's Choice Poster - Authors to be by their Poster	<b>Lunch</b>
	Hall E	Papers	Half Day Field Trips	Papers	Australian Coastal Society AGM
	Mtg Rm 1	Papers	Half-day: Southern Coast	Papers	Wrap up and next Conference
	Mtg Rm 2	Papers	Half-day: Metropolitan Adelaide Beaches	Papers	
	Mtg Rm 3	Papers	Half day: Northern Coast	Papers	
	Mtg Rm 10	Papers		Papers	
<b>Afternoon Tea</b>	<b>Afternoon Tea</b>	<b>Afternoon Tea</b>	<b>Afternoon Tea</b>	<b>Afternoon Tea</b>	<b>Afternoon Tea &amp; End of Conference</b>
	Hall E	Papers	Field Trips Cont'd	Papers	
	Mtg Rm 1	Papers	Field Trips Cont'd	Papers	
	Mtg Rm 2	Papers	Field Trips Cont'd	Papers	
	Mtg Rm 3	Papers	Field Trips Cont'd	Papers	
	Mtg Rm 10	Papers	Field Trips Cont'd	Papers	
<b>Welcome Function- Welcome to</b>	Evening -	<b>Cocktail Session -</b>		<b>Gaia Conference Dinner</b>	

<b>Country and Official Conference Opening</b>	as Handbook	<b>Museum of South Australia</b>	<b>Own Arrangements</b>	<b>- Adelaide Convention Centre From 6:30pm.</b>	
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Server Date and time is 12/06/10 11:28 AM



Plantation Management Plan

For

Keith and Christine Rowe's property, Ravensthorpe, WA

2010



12.2.1

## Introduction to Carbon Neutral

Carbon Neutral is a not for profit organisation dedicated to reducing emissions through education and revegetation. Visit [www.carbonneutral.com.au](http://www.carbonneutral.com.au) for more information.

## Project Summary

Carbon Neutral intends to undertake revegetation works at Keith and Christine Rowe's property (Lots 301,302, and 303 of plan 44655) in Ravensthorpe. The property has pre-existing restrictive covenants with the National Trust of Australia which are designed to protect the vegetated creek lines and other vegetation of significance.

This project has been designed at the request of the land owners to enhance the environmental qualities of the site through the re-establishment of native vegetation in a similar species composition and structure to that found in the surrounding plant communities.

Project Title	Rowe 2010-11 Ravensthorpe WA
Date of Plan Preparation	22 June 2010
Land owners	Keith and Christine Rowe
Carbon Right Owner	Carbon Neutral Ltd. (proposed)
Site Manager	Justin Jonson of Threshold Environmental
Property Location	Ravensthorpe/Hopetoun Road
Lot Details	301, 302, & 303 of Plan 44655
Zone	Rural
Lots Area	225.38 ha
Nearest Town	Ravensthorpe
Site Latitude	S 33.6015
Site Longitude	E 120.1057
Revegetation Site Area	58.75 ha
Proportion of Site	26.07%

Location Map:

Below is the location of the property

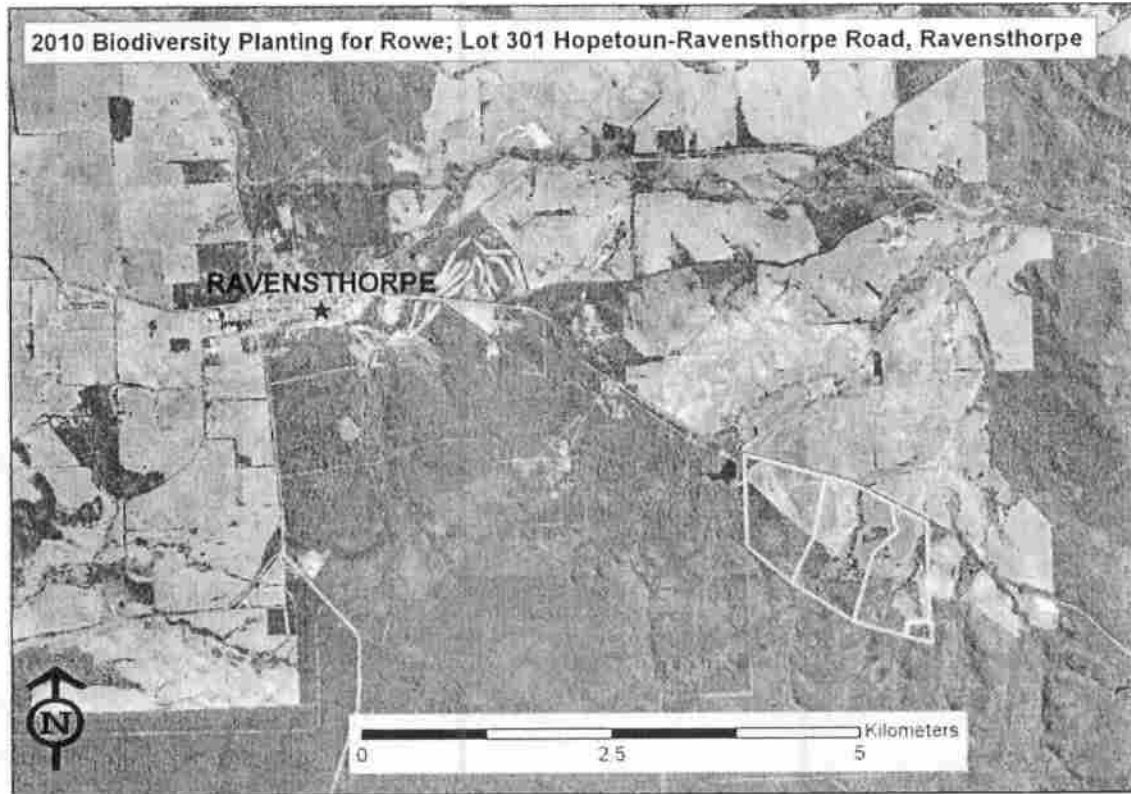
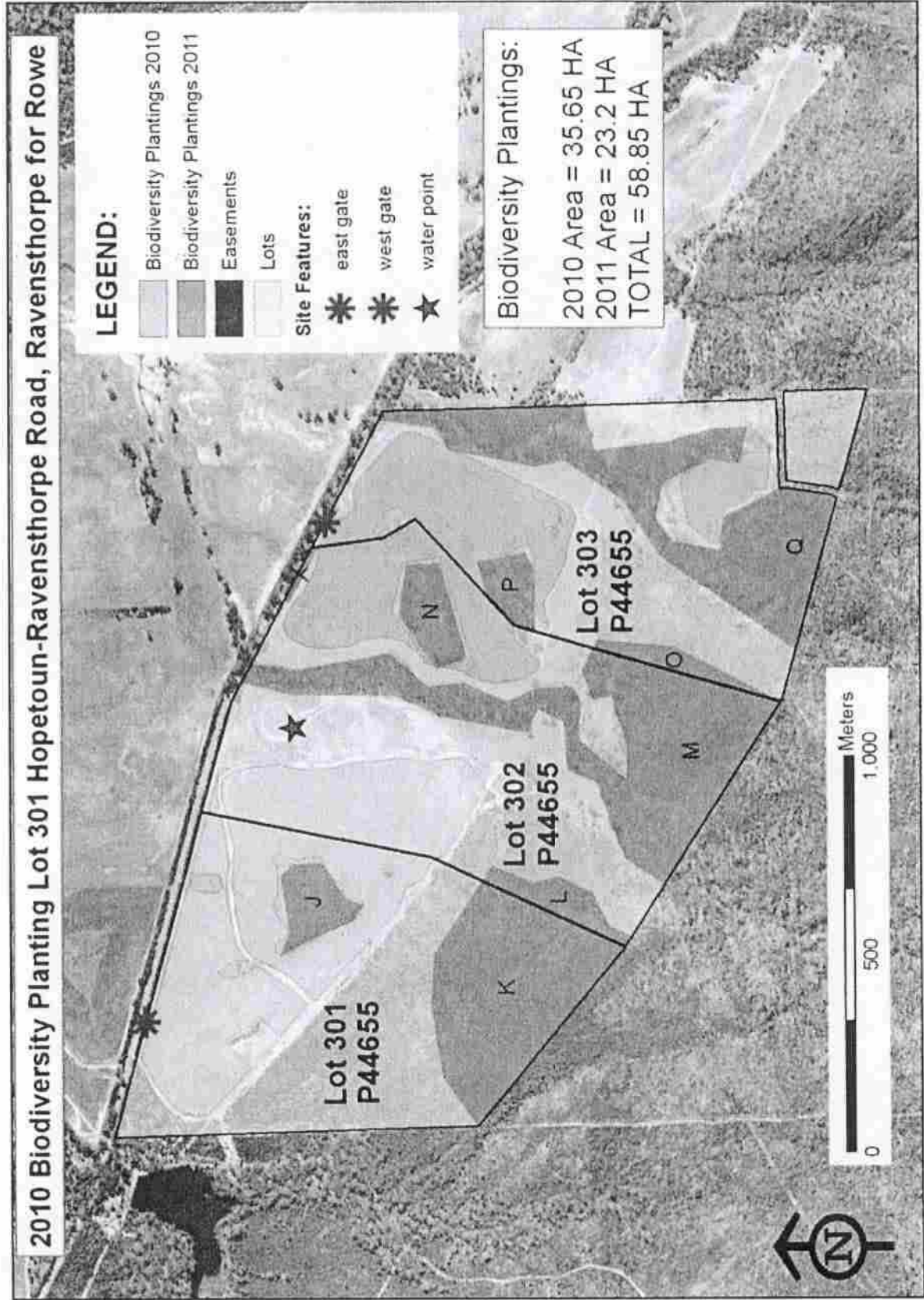


Figure 1: Location of Property in relation to Ravensthorpe town site. Property lots (301,302,303) adjacent to the Ravensthorpe/Hopetoun Road are indicated with a yellow outline.



## Establishment Plan

### Native Vegetation

A total of 70.57 hectares of remnant vegetation on the property is covered by a conservation covenant with the National Trust. The covenant requires the property owner to protect the integrity of the remnant vegetation in the creek lines. Carbon Neutral intends on establishing a biodiverse mix of native vegetation on portions of the cleared land area across Lots 301, 302, and 303 over two years to further enhance these conservation initiatives.

Reserves to the north and south of the property and are in excellent condition. This has been demonstrated on the Rowe lots, with an outstanding presence and representation of local fauna. Carbon Neutral will commission revegetation on some portions of cleared land with plant communities that reflect the surrounding ecosystems which support that native wildlife.

### Dwellings

As part of the fire management plan there will be no revegetation activities within 50 metres of any buildings on the property. Fire breaks located along the perimeter and through the centre of the plantings will provide suitable access for ongoing maintenance. These breaks will build on the extent of the already established tracks across the site.

### Control of Declared Animals and Plants

There is no evidence of declared animals on the property at this time. If any are discovered an addition to this plan will be written outlining the control. Weed species found on the property include capeweed, barley grass, flatweed, peppercress, ryegrass and clover. The areas to be revegetated will be sprayed with glyphosate to eliminate the weed species from entering the remnant vegetation.

### Areas to be Planted

Areas to be planted on the property are outlined on the 'Carbon Neutral Site Map' including compartment sizes. These areas are proposed to be implemented over two years with a summary of the blocks and corresponding sizes reported below. With approval, the total area planted to biodiversity plantings over the two years will be approximately **58.75 Ha**.

BLOCK	AREA (HA) 2010	AREA (HA) 2011
1	13.26	-
2	22.29	-
3	-	23.2
<b>TOTAL</b>	<b>35.55</b>	<b>23.2</b>

### Species

The following species list developed for this project is a reflection of various seed collections sourced from local vegetation from the Rowe site and surrounding unmanaged crown lands. This locally collected seed will best replicate the native

vegetation systems best suited to the site. The following is the species list which will be used in the direct seeded Biodiversity plantings on the site for 2010. A similar list will be provided prior to the 2011 site works.

#	Species List ROWE 2010
1	Acacia accuminata
2	Acacia affin. ericifolia
3	Acacia curvata
4	Acacia cyclops
5	Acacia glaucoptera
6	Acacia lasiocalyx
7	Acacia redolans
8	Acacia sp. 1 (salmon gum)
9	Allocasuarina huegeliana
10	Allocasuarina humilis
11	Billaderia sp.
12	Callistemon phoeniceous
13	Calothamnus quadrifidus
14	Dodonea sp.
15	Eucalyptus conglobata
16	Eucalyptus extensa
17	Eucalyptus flocktoniae
18	Eucalyptus occidentalis
19	Eucalyptus oleosa
20	Eucalyptus salmonophloia
21	Eucalyptus vergrandis
22	Hakea laurina
23	Hakea lissocarpha
24	Melaleuca sp 1
25	Melaleuca sp 2
26	Melaleuca accuminata
27	Melaleuca hamata
28	Melaleuca pauperiflora
29	Santalum acuminatum
30	Senna artisimeoides
31	Templetonia retusa

### Planting Layout

The site will be direct seeded with a GreatPlains modified agricultural seeder. This machine has previously demonstrated excellent direct seeding results in a 250 ha restoration project in Jerramungup in 2008, and a further 40 ha in 2009. The machine implements seeding lines at 1.4 meters, resulting in a natural well spaced plant layout. All seeding lines will be implemented on the contour.

The use of local native seeds to establish the vegetation across the site will ensure

good root formation from the germinates (and associated survival), in addition to a broad suite of species established in natural spacing and planting formations. Small scalping blades (~50cm in width) will assist with short to medium term weed management, without creating large 'spoil' piles across the site. The scalp areas will also assist with water penetration and the removal of the weed seed within the soil in the immediate area around the seeding lines.

### **Pest Management and Vegetation Monitoring**

No infestations of pests such as rabbits have been observed on the property. The Conservation Covenant on the site prevents baits, shooting and trapping of animals from within the remnant creek lines. The weeds within the cleared land will be sprayed with glyphosate prior to the commencement of seeding. The site will be monitored after planting for evidence of pest damage to the seedlings and weed infestations as outlined below.

- (a) Post planting report to be finalised by August 15 2010.
- (b) First monitoring visit with survival rates calculated by December 30 2009.
- (c) Second monitoring visit with survival rates calculated by April 28 2011.
- (d) Third monitoring visit with survival rates calculated by August 15 2011. From this an infilling decision will be made.
- (e) Annual inspections and reports will be carried out until the planting reaches five years of age.

### **Firebreaks**

Firebreaks will be maintained around the plantation and the boundary of the Lots in accordance with best practice fire prevention and management protocols. This includes the strategic placement of firebreaks, access, and water points, to ensure ease of fire control. All breaks will be established to meet or exceed requirements as outlined in:

- Guidelines for Plantation Fire Protection. 2<sup>nd</sup> Ed. (Fire and Emergency Services of Western Australia, 2001).
- The Code of Practice for Timber Plantations in Western Australia (Forest Industries Federation (WA) Inc, 2006)
- Planning Bulletin Number 56, Farm Forestry Policy (Western Australian Planning Commission, February 2003)

Canopy spread will be considered in the vertical clearance requirements.

### **Fertilising**

Carbon Neutral will not be fertilizing the plantation areas of this property. These local species do not require additional fertilisers.

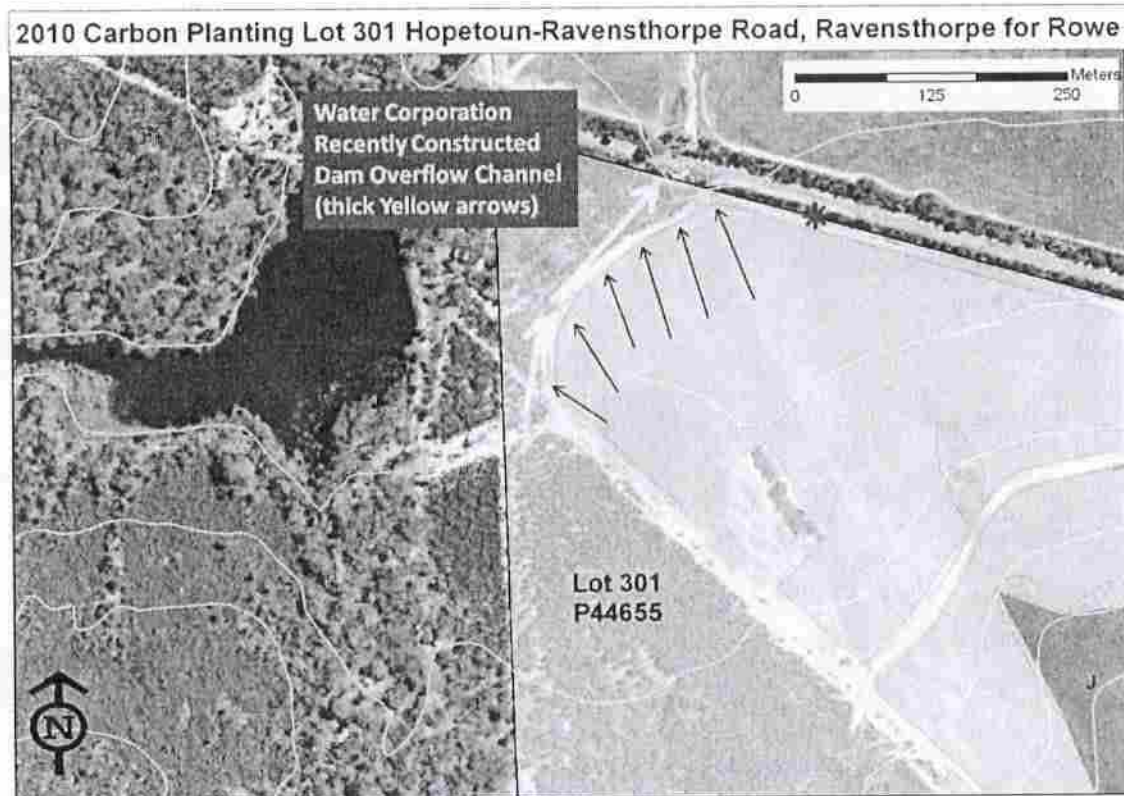
## Maintenance Plan

### Weed and Pest Control

Site inspections by our staff assess the condition of the site including the early detection of weeds, pests and diseases and observations about seedling establishment.

Herbicides will be used pre planting to remove any weed species present and prevent any weeds from germinating in the future. Monitoring will determine if the site needs any post planting spraying for weed infestations.

The application of herbicides will not be of risk to local water supplies. In addition to following best management practice for herbicide application, the position of the proposed planting areas will not pose a risk to the town water supply (see image below).



The inspections will also monitor for pest damage on the revegetation areas plus the general condition of the whole property. Local people may be hired at times to perform weed or pest control on the property.

If a declared weed or pest is discovered on the property local authorities or the appropriate government agency will be notified. A management plan tailored to the declared weed or pest will be developed at that time.



## **Native Vegetation**

The proposed revegetation works will provide a buffer to the existing remnant native vegetation on the property. As all species are locally collected, the resulting vegetation will provide genetic continuity with existing remnants. The site will provide a visually pleasing native vegetation community which will add conservation value to the unique vegetation of the Ravensthorpe region. The establishment of these plants up slope from neighbouring agricultural land will also assist in reducing the water table and abating the salinity that is beginning to come to the surface just down slope of the site. The direct seeded vegetation will capture and use water before it infiltrates into the valley creek lines.

## **Access and Firebreak Maintenance**

Carbon Neutral will engage local contractors to maintain access tracks and fire breaks across the site. The firebreaks will be maintained according to the local Ravensthorpe Shire Policy for Agroforestry and Plantations and best-practice.

There are two main entry gates to the site on the Ravensthorpe Hopetoun Road for access. Keith and Christine Rowe are currently building a home on the site.

## **Agricultural Aspects**

The property is not currently used for agricultural purposes, and it is not the intention of the owners to undertake any such land use options. Temporary fences will be erected around the planting site after establishment so native animals do not harm the establishing revegetation. The fences will then be removed three years after the direct seeding, once the native vegetation has been established to a density and size which will ensure survival.

## **Buildings and other Infrastructure**

Buildings on the property include a shed and a house site on which Keith and Christine Rowe are currently building. Within the sheds are equipment and machinery owned by the Rows. Mains power runs through the property from the western end through to the east.

There is a large dam in Lot 302 able to provide a reliable water supply for fire control and management needs. Refer to Carbon Neutral Site Map.

The revegetated areas will not be planted adjacent to, or in proximity to, any of the site infrastructure. All current tracks will be maintained.

### **Bio-security**

Carbon Neutral is aware of the movement of weed seeds between properties and also the movement of *Phytophthora cinnamom* (Dieback Fungus). As the property is located in a highly sensitive and biodiverse area, all necessary action will be taken to prevent the spread.

As part of the arrangement between Carbon Neutral and its agents, vehicles and machinery will be washed down before moving between properties.

### **Fire Management Plan**

To be developed and submitted to Shire administration. The preferred consultant for this site is John Evans South West Fire Services.